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**Amendment**

LCO No. 6745

\*SB0093406745SD0\*

Offered by:

SEN. MURPHY, 16<sup>th</sup> Dist.

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To: Subst. Senate Bill No. 934

File No. 446

Cal. No. 348

**"AN ACT PERMITTING STEM CELL RESEARCH AND BANNING  
THE CLONING OF HUMAN BEINGS."**

1 Strike everything after the enacting clause and substitute the  
2 following in lieu thereof:

3 "Section 1. (NEW) (*Effective from passage*) (a) As used in this section  
4 and section 19a-32c of the general statutes, as amended by this act, and  
5 sections 3 and 4 of this act:

6 (1) "Institutional review committee" means the local institutional  
7 review committee specified in 21 USC 360j(g)(3)(A)(i), as amended  
8 from time to time, and, when applicable, an institutional review board  
9 established in accordance with the requirements of 45 CFR 46, Subpart  
10 A, as amended from time to time.

11 (2) "Cloning of a human being" means inducing or permitting a  
12 replicate of a living human being's complete set of genetic material to

13 develop after gastrulation commences.

14 (3) "Gastrulation" means the process immediately following the  
15 blastula state when the hollow ball of cells representing the early  
16 embryo undergoes a complex and coordinated series of movements  
17 that results in the formation of the three primary germ layers, the  
18 ectoderm, mesoderm and endoderm.

19 (4) "Embryonic stem cells" means cells created through the joining of  
20 a human egg and sperm or through nuclear transfer that are  
21 sufficiently undifferentiated such that they cannot be identified as  
22 components of any specialized cell type.

23 (5) "Nuclear transfer" means the replacement of the nucleus of a  
24 human egg with a nucleus from another human cell.

25 (6) "Eligible institution" means (A) a nonprofit, tax-exempt academic  
26 institution of higher education, (B) a hospital that conducts biomedical  
27 research, or (C) any entity that conducts biomedical research or  
28 embryonic or human adult stem cell research.

29 (b) No person shall knowingly (1) engage or assist, directly or  
30 indirectly, in the cloning of a human being, (2) implant human  
31 embryos created by nuclear transfer into a uterus or a device similar to  
32 a uterus, or (3) facilitate human reproduction through clinical or other  
33 use of human embryos created by nuclear transfer. Any person who  
34 violates the provisions of this subsection shall be fined not more than  
35 one hundred thousand dollars or imprisoned not more than ten years,  
36 or both. Each violation of this subsection shall be a separate and  
37 distinct offense.

38 (c) (1) A physician or other health care provider who is treating a  
39 patient for infertility shall provide the patient with timely, relevant  
40 and appropriate information sufficient to allow that person to make an  
41 informed and voluntary choice regarding the disposition of any  
42 embryos or embryonic stem cells remaining following an infertility  
43 treatment.

44 (2) A patient to whom information is provided pursuant to  
45 subdivision (1) of this subsection shall be presented with the option of  
46 storing, donating to another person, donating for research purposes, or  
47 otherwise disposing of any unused embryos or embryonic stem cells.

48 (3) A person who elects to donate for stem cell research purposes  
49 any human embryos or embryonic stem cells remaining after receiving  
50 infertility treatment, or unfertilized human eggs or human sperm shall  
51 provide written consent for that donation and shall not receive direct  
52 or indirect monetary payment for such human embryos, embryonic  
53 stem cells, unfertilized human eggs or human sperm.

54 (4) Any person who violates the provisions of this subsection shall  
55 be fined not more than fifty thousand dollars or imprisoned not more  
56 than five years, or both. Each violation of this subsection shall be a  
57 separate and distinct offense.

58 (d) A person may conduct research involving embryonic stem cells,  
59 provided (1) the research is conducted with full consideration for the  
60 ethical and medical implications of such research, (2) the research is  
61 conducted before gastrulation occurs, (3) prior to conducting such  
62 research, the person provides to the Commissioner of Public Health  
63 documentation verifying that any human embryos, embryonic stem  
64 cells, unfertilized human eggs or human sperm used in such research  
65 have been donated voluntarily in accordance with the provisions of  
66 subsection (c) of this section, on a form and in the manner prescribed  
67 by the Commissioner of Public Health, (4) the general research  
68 program under which such research is conducted is reviewed and  
69 approved by an institutional review committee, as required under  
70 federal law, and (5) the specific protocol used to derive stem cells from  
71 an embryo is reviewed and approved by an institutional review  
72 committee.

73 (e) The Commissioner of Public Health shall enforce the provisions  
74 of this section and may adopt regulations, in accordance with the  
75 provisions of chapter 54 of the general statutes, relating to the

76 administration and enforcement of this section. The commissioner may  
77 request the Attorney General to petition the Superior Court for such  
78 order as may be appropriate to enforce the provisions of this section.

79 Sec. 2. Section 19a-32c of the general statutes is repealed and the  
80 following is substituted in lieu thereof (*Effective from passage*):

81 (a) There is created a Biomedical Research Trust Fund which shall  
82 be a separate nonlapsing fund. The trust fund may accept transfers  
83 from the Tobacco Settlement Fund and may apply for and accept gifts,  
84 grants or donations from public or private sources to enable the  
85 account to carry out its objectives. [On and after July 1, 2001, the] The  
86 Commissioner of Public Health, in consultation with the Secretary of  
87 the Office of Policy and Management, may make grants-in-aid from  
88 the trust fund to eligible institutions for the purpose of funding  
89 biomedical research in the fields of heart disease, cancer and other  
90 tobacco-related diseases, and embryonic and human adult stem cell  
91 research. [For the fiscal year ending June 30, 2002, the total amount of  
92 such grants-in-aid made during the fiscal year shall not exceed two  
93 million dollars. For the fiscal year ending June 30, 2003, and each fiscal  
94 year thereafter, the total amount of such grants-in-aid made during the  
95 fiscal year shall not exceed fifty per cent of the total amount held in the  
96 trust fund as of the date such grants-in-aid are approved. Not later  
97 than April 1, 2001, the Commissioner of Public Health shall develop an  
98 application for grants-in-aid under this section and may receive  
99 applications from eligible institutions for such grants-in-aid on and  
100 after said date. For purposes of this section, "eligible institution" means  
101 (1) a nonprofit, tax-exempt academic institution of higher education, or  
102 (2) a hospital that conducts biomedical research.]

103 (b) Not later than June 30, 2006, the Stem Cell Research Advisory  
104 Committee established pursuant to section 3 of this act shall develop  
105 an application for grants-in-aid under this section for the purpose of  
106 conducting embryonic or human adult stem cell research and may  
107 receive applications from eligible institutions for such grants-in-aid on  
108 and after said date. The Stem Cell Research Advisory Committee shall

109 require any applicant for a grant-in-aid under this section to conduct  
110 stem cell research to submit (1) a complete description of the  
111 applicant's organization, (2) the applicant's plans for stem cell research  
112 and proposed funding for such research from sources other than the  
113 state of Connecticut, and (3) proposed arrangements concerning  
114 financial benefits to the state of Connecticut as a result of any patent,  
115 royalty payment or similar rights developing from any stem cell  
116 research made possible by the awarding of such grant-in-aid. Said  
117 committee shall direct the Commissioner of Public Health with respect  
118 to the awarding of such grants-in-aid after considering  
119 recommendations from the Stem Cell Research Peer Review  
120 Committee established pursuant to section 4 of this act.

121 (c) Commencing with the fiscal year ending June 30, 2006, and for  
122 each of the nine consecutive fiscal years thereafter, until the fiscal year  
123 ending June 30, 2015, not less than ten million dollars shall be made  
124 available from the Biomedical Research Trust Fund for grants-in-aid to  
125 eligible institutions for the purpose of conducting embryonic or human  
126 adult stem cell research, as directed by the Stem Cell Research  
127 Advisory Committee established pursuant to section 3 of this act. Any  
128 balance of such amount not used for such grants-in-aid during a fiscal  
129 year shall be carried forward for the fiscal year next succeeding for  
130 such grants-in-aid.

131 Sec. 3. (NEW) (*Effective from passage*) (a) There is established a Stem  
132 Cell Research Advisory Committee. The committee shall consist of the  
133 Commissioner of Public Health and eight members who shall be  
134 appointed as follows: Two by the Governor, one of whom shall be  
135 nationally recognized as an active investigator in the field of stem cell  
136 research and one of whom shall have background and experience in  
137 the field of bioethics; one each by the president pro tempore of the  
138 Senate and the speaker of the House of Representative, who shall have  
139 background and experience in private sector stem cell research and  
140 development; one each by the majority leaders of the Senate and  
141 House of Representatives, who shall be academic researchers  
142 specializing in stem cell research; and one each by the minority leaders

143 of the Senate and House of Representatives, who shall have  
144 background and experience in either private or public sector stem cell  
145 research and development or related research fields, including, but not  
146 limited to, embryology, genetics or cellular biology. Members shall  
147 serve for a term of four years commencing on October first, except that  
148 members first appointed by the Governor and the majority leaders of  
149 the Senate and House of Representatives shall serve for a term of two  
150 years. No member may serve for more than two consecutive four-year  
151 terms and no member may serve concurrently on the Stem Cell  
152 Research Peer Review Committee established pursuant to section 4 of  
153 this act. All initial appointments to the committee shall be made by  
154 October 1, 2005. Any vacancy shall be filled by the appointing  
155 authority.

156 (b) The Commissioner of Public Health shall serve as the  
157 chairperson of the committee and shall schedule the first meeting of  
158 the committee, which shall be held no later than December 1, 2005.

159 (c) All members appointed to the committee shall work to advance  
160 embryonic and human adult stem cell research. Any member who fails  
161 to attend three consecutive meetings or who fails to attend fifty per  
162 cent of all meetings held during any calendar year shall be deemed to  
163 have resigned from the committee.

164 (d) All members shall be deemed public officials and shall adhere to  
165 the code of ethics for public officials set forth in chapter 10 of the  
166 general statutes. No member shall participate in the affairs of the  
167 committee with respect to the review or consideration of any grant-in-  
168 aid application filed by such member or by any eligible institution in  
169 which such member has a financial interest, or with whom such  
170 member engages in any business, employment, transaction or  
171 professional activity.

172 (e) The Stem Cell Research Advisory Committee shall use the  
173 moneys available for stem cell research in the Biomedical Research  
174 Trust Fund pursuant to section 19a-32c of the general statutes, as

175 amended by this act, for the purposes of (1) developing, in  
176 consultation with the Commissioner of Public Health, a donated funds  
177 program to encourage the development of funds other than state  
178 appropriations for embryonic and human adult stem cell research, (2)  
179 examining and identifying specific ways to improve and promote for-  
180 profit and not-for-profit embryonic and human adult stem cell and  
181 related research in the state, including, but not limited to, identifying  
182 both public and private funding sources for such research, maintaining  
183 existing embryonic and human adult stem cell related businesses,  
184 recruiting new embryonic and human adult stem cell related  
185 businesses to the state and recruiting scientists and researchers in such  
186 field to the state, (3) establishing and administering, in consultation  
187 with the Commissioner of Public Health, a stem cell research grant  
188 program which shall provide grants-in-aid to eligible institutions for  
189 the advancement of embryonic or human adult stem cell research  
190 pursuant to section 19a-32c of the general statutes, as amended by this  
191 act, and (4) monitoring the stem cell research conducted by eligible  
192 institutions that receive such grants-in-aid.

193 (f) Connecticut Innovations, Incorporated shall serve as  
194 administrative staff of the committee and shall assist the committee in  
195 (1) developing the application for the grants-in-aid authorized under  
196 subsection (e) of this section, (2) reviewing such applications, (3)  
197 executing any assistance agreements or other agreements in connection  
198 with the awarding of such grants-in-aid, and (4) performing such other  
199 administrative duties as the committee deems necessary.

200 (g) Not later than June 30, 2007, and annually thereafter until June  
201 30, 2015, the Stem Cell Research Advisory Committee shall report, in  
202 accordance with section 11-4a of the general statutes, to the Governor  
203 and the General Assembly on (1) the amount of grants-in-aid awarded  
204 from the Biomedical Research Trust Fund pursuant to subsection (e) of  
205 this section for stem cell research, (2) the recipients of such grants-in-  
206 aid, and (3) the current status of stem cell research in the state.

207 Sec. 4. (NEW) (*Effective from passage*) (a) There is established a Stem

208 Cell Research Peer Review Committee. The committee shall consist of  
209 five members appointed by the Commissioner of Public Health. All  
210 members appointed to the committee shall (1) have demonstrated  
211 knowledge and understanding of the ethical and medical implications  
212 of embryonic and human adult stem cell research or related research  
213 fields, including, but not limited to, embryology, genetics or cellular  
214 biology, (2) have practical research experience in human adult or  
215 embryonic stem cell research or related research fields, including, but  
216 not limited to, embryology, genetics or cellular biology, and (3) work  
217 to advance embryonic and adult stem cell research. Members shall  
218 serve for a term of four years commencing on October first, except that  
219 three members first appointed by the Commissioner of Public Health  
220 shall serve for a term of two years. No member may serve for more  
221 than two consecutive four-year terms and no member may serve  
222 concurrently on the Stem Cell Research Advisory Committee  
223 established pursuant to section 3 of this act. All initial appointments to  
224 the committee shall be made by October 1, 2005. Any member who  
225 fails to attend three consecutive meetings or who fails to attend fifty  
226 per cent of all meetings held during any calendar year shall be deemed  
227 to have resigned from the committee.

228 (b) All members shall be deemed public officials and shall adhere to  
229 the code of ethics for public officials set forth in chapter 10 of the  
230 general statutes. No member shall participate in the affairs of the  
231 committee with respect to the review or consideration of any grant-in-  
232 aid application filed by such member or by any eligible institution  
233 with whom such member has a financial interest in, or engages in any  
234 business, employment, transaction or professional activity.

235 (c) Prior to the awarding of any grants-in-aid for embryonic or  
236 human adult stem cell research pursuant to section 3 of this act, the  
237 Stem Cell Research Peer Review Committee shall review all  
238 applications submitted by eligible institutions for such grants-in-aid  
239 and make recommendations to the Commissioner of Public Health and  
240 the Stem Cell Research Advisory Committee established pursuant to  
241 section 3 of this act with respect to the ethical and scientific merit of



242 each application.

243 (d) The Peer Review Committee shall establish guidelines for the  
244 rating and scoring of such applications by the Stem Cell Research Peer  
245 Review Committee.

246 (e) All members of the committee shall become and remain fully  
247 cognizant of the National Academies Guidelines For Human  
248 Embryonic Stem Cell Research, as from time to time amended, and the  
249 committee may make recommendations to the Stem Cell Research  
250 Advisory Committee and the Commissioner of Public Health  
251 concerning the adoption of said guidelines, in whole or in part, in the  
252 form of regulations adopted pursuant to chapter 54 of the general  
253 statutes.

254 Sec. 5. Subsection (c) of section 4-28e of the general statutes is  
255 repealed and the following is substituted in lieu thereof (*Effective from*  
256 *passage*):

257 (c) (1) For the fiscal year ending June 30, 2001, disbursements from  
258 the Tobacco Settlement Fund shall be made as follows: (A) To the  
259 General Fund in the amount identified as "Transfer from Tobacco  
260 Settlement Fund" in the General Fund revenue schedule adopted by  
261 the General Assembly; (B) to the Department of Mental Health and  
262 Addiction Services for a grant to the regional action councils in the  
263 amount of five hundred thousand dollars; and (C) to the Tobacco and  
264 Health Trust Fund in an amount equal to nineteen million five  
265 hundred thousand dollars.

266 (2) For the fiscal year ending June 30, 2002, and each fiscal year  
267 thereafter, disbursements from the Tobacco Settlement Fund shall be  
268 made as follows: (A) To the Tobacco and Health Trust Fund in an  
269 amount equal to twelve million dollars; (B) to the Biomedical Research  
270 Trust Fund in an amount equal to four million dollars; (C) to the  
271 General Fund in the amount identified as "Transfer from Tobacco  
272 Settlement Fund" in the General Fund revenue schedule adopted by  
273 the General Assembly; and (D) any remainder to the Tobacco and

274 Health Trust Fund.

275 (3) For the fiscal year ending June 30, 2005, the sum of twenty  
 276 million dollars shall be disbursed from the Tobacco Settlement Fund to  
 277 the Biomedical Research Trust Fund, and shall be available for  
 278 disbursement from the Biomedical Research Trust Fund, for embryonic  
 279 or human adult stem cell research, as follows: The sum of ten million  
 280 dollars shall be available for the fiscal year ending June 30, 2006; the  
 281 sum of ten million dollars shall be available for the fiscal year ending  
 282 June 30, 2007.

283 (4) For each of the fiscal years ending June 30, 2008, to June 30, 2015,  
 284 inclusive, the sum of ten million dollars shall be disbursed from the  
 285 Tobacco Settlement Fund to the Biomedical Research Trust Fund, for  
 286 embryonic or human adult stem cell research.

287 Sec. 6. *(Effective from passage)* The sum of twenty million dollars is  
 288 appropriated to the Tobacco Settlement Fund, from the General Fund,  
 289 for the fiscal year ending June 30, 2005."

This act shall take effect as follows and shall amend the following sections:		
Section 1	<i>from passage</i>	New section
Sec. 2	<i>from passage</i>	19a-32c
Sec. 3	<i>from passage</i>	New section
Sec. 4	<i>from passage</i>	New section
Sec. 5	<i>from passage</i>	4-28e(c)
Sec. 6	<i>from passage</i>	New section